

## REMARKS

Claims 62, 73, 74 and 77 have been canceled.

Applicants have amended the remaining Claims so they now read in the style of allowed Claim 63. Specifically:

Claim 60 has been amended to remove reference to 60 contiguous nucleotide regions in part (b) so that the percent identity is now measured against the whole of the listed SEQ ID NO's. In addition, the function of eliciting an immune response against a protein having a stated SEQ ID NO, which is the sequence of canine IL-13, has been added to the claim language. Support for nucleic acid molecules encoding proteins having such a function can be found in the specification, for example, on page 37, lines 17-23.

Claim 61 has been amended to remove amino acid SEQ ID NO's and to specify specific nucleic acid SEQ ID NO's.

Claim 63 has been amended to include the function of eliciting an immune response against a protein having a stated SEQ ID NO, which is the sequence of canine IL-13.

Claim 64 has been amended in part (a) to specify proteins have 40 (instead of 50) contiguous amino acids identical to the stated SEQ ID NO's. In addition, the language requiring the 40 amino acid region bind an IL-23 protein has been removed. Part (b) has of Claim 64 has been amended to included functional language for proteins having 95% identity. Support for proteins having the stated functional language can be found in the specification, for example, on page 50, lines 23-31, through page 51, lines 1-5.

Claim 66 has been amended to clarify the different regions of the fusion protein. The term 'domains' has been removed and the chimeric nucleic acid molecule is now described as composed of two sequences whose characteristics are described in the claim.

Claims 68, 69 and 70 have been amended by the removal of the term 'domain'. Applicants believe the language of these claims, along with that of Claim 66 from which they depend, is now easier to read and understand.

Claim 71 has been amended to specify sequences within the chimeric nucleic acid molecule be 95% identical to stated SEQ ID NO's; in addition, functional language has been added to this claim.

Claim 72 has been amended to specify particular sequences for the chimeric nucleic acid molecule.

Claim 75 has been amended to clarify the language. The claim now uses specific SEQ ID NO's when referring to portions of the fusion protein.

Claim 76 has been amended to include several more SEQ ID NO's.

Claim 78 has been amended so the therapeutic composition now contains protein instead of nucleic acid molecules. This claim has also been made dependent from Claim 64.

Claim 80 has been amended in part (a)(ii) so that the percent identity is measured against the whole of the stated SEQ ID NO; in addition, functional language has been added to this part of the claim. Part (iii) of Claim 80 has also been amended to include functional language.

Finally, a functional requirement for short amino acid sequences identical to stated SEQ ID NO's has been removed.

Accordingly, Applicants submit no new matter has been entered into the Application.

## II. Rejections under 35 U.S.C. §112, second paragraph

The examiner has rejected claims 75-79 as being indefinite for failing to point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner states the limitation 'canine IL-13R $\alpha$ 2 protein domain' is indefinite since the protein is referred to only by name and the claim lacks any associated structural limitation. Applicants note that SEQ ID NO's have been added to the language of Claim 75 to provide a structural limitation.

## III. Rejections under 35 U.S.C. §112, first paragraph

The Examiner has rejected previous claims 60, 64, 66-70, 72-75 and 78-80 under 35 U.S.C. §112, first paragraph, stating that while the specification is enabling for "...nucleic acids disclosed as SEQ ID NO:54, 56, 57, 59, 60, 62-65, 67, 68 or 70 or fragments thereof (of specific lengths) or species which vary by codon degeneracy therefrom, as well as with proteins encoded thereby or fragments of said proteins that retain binding function...", it is not enabling for any nucleic acids only 95% identical to a 60 nucleotide fragment of any of said sequences nor nucleic acid molecules comprising as little as 40 nucleotides which encode proteins that bind canine IL-13. The Examiner further states the specification does not disclose which portion of the protein

is required for binding activity and that undue experimentation would be required of the skilled artisan to make and/or use the claimed invention in its full scope. Finally, the Examiner has stated the art of gene therapy, and in dogs in particular, is not considered to be routine or predictable in the art and in the absence of any specific guidance and working examples in the specification, claims to such therapy are not enabled.


Applicants note the claims have been amended to remove reference to short regions of a protein or nucleic acid molecule having some percentage identity with the given SEQ ID NO's. The claims have been drafted so that percent identities be compared to the whole of the given SEQ ID NO's. In addition, Applicants have removed any functional requirement from claims referring to short regions of protein, or nucleic acid sequence, identical to regions of stated SEQ ID NO's.

With respect to claims referring to gene therapy, Applicants note such claims have been amended so that the therapeutic compositions now comprise protein instead of nucleic acid molecules.

In view of the above amendments and remarks, Applicants believe all of the newly submitted claims are in condition for allowance and solicit an allowance from the Examiner. Should any issues remain unresolved, or should the Examiner have any questions regarding this Application, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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By: 

Richard J. Stern, Ph.D.  
Registration No. 50,668  
Heska Corporation  
1613 Prospect Parkway  
Fort Collins, Colorado 80525  
Telephone: (970) 493-7272  
Facsimile: (970) 491-9976